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ABSTRACT

The essay reviews major components of the mentor role that a facilitator of adult learning should consider in the process of helping adults to learn. It contains suggestions about ways in which a facilitator can reflect on his practices and identify ideas that will help him to be more effective. To help the facilitator better understand adult learners, generalizations about the dynamics of adult learning are presented, and some of the organized knowledge regarding educational needs of adults is reviewed, grouped in relation to four concerns of facilitators: attraction, intake, support, and retention. Considerations related to the setting for learning are offered, and suggestions are made for the development of educational objectives. To assist the facilitator's selection of appropriate learning activities, a table presents a classification of continuing education learning-teaching methods, and several types of learning episodes are described: seminars, workshops, case studies, buzz sessions, role-playing, T-groups, and simulation. The process of organizing learning activities is explored, and evaluation procedures are described. Eighteen steps are given that a facilitator might follow to obtain a comprehensive overview of a learning episode. In his conclusion, the author lists eight ways program administrators can assist facilitators of learning to become more effective. (Author/AJ)

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HELPING ADULTS TO LEARN

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Facilitating Learning

More and more adults are discovering that if they are to become all that they want to be they must find ways to link action and knowledge. Modern adults work with knowledge as well as with things and people. The most successful workers, parents, and organization members have developed a repertoire of effective strategies for alternating between action problems and knowledge resources (Knox, 1973). Thinking and feeling and doing continually intermingle as the adult seeks to maintain and enhance his selfhood, to find direction and fulfillment, to cope with the demands and constraints that confront him, to achieve understanding and mastery, to develop more creative and humane relationships with other people, and to become a fully functioning person (Rogers, 1969, p. 288).

When adults enter a continuing education activity, they typically do so for several fairly specific reasons. Many are trying to educate themselves, to find answers to their questions, and to formulate more useful questions. They engage in learning in order to improve their ability to know and feel and act (Knox, 1968a). Those who successfully help adults to learn have a respect for their growth strivings and have ways to facilitate the process (Rogers, 1969, p. 5). The process of facilitating learning is basically the same whether the learner is somebody else or oneself. The process of planning and guiding adult learning is termed the mentor role. Persons who effectively serve as facilitators of learning are able to perform well in the main components of the mentor role. The five broad components

of the mentor role deal with learners, setting, objectives, activities, and evaluation (Knox, 1973).

A learning episode may be a single period of coaching, a meeting with a small group of adult participants, or a session of an evening class. During a learning episode the function of the facilitator may be to give information, ask questions, discuss printed materials, or in other ways help the learner to achieve his or her educational objectives. During each learning episode in which someone enters into a helping relationship to facilitate learning, all five components of the mentor role are attended to. They may be attended to by the learner himself, by someone trying to help, or by both of them.

Facilitation of adult learning occurs throughout our society as people need to increase their competence and others try to help them. Adults try to change themselves in relation to all of their life roles (Havighurst, 1956). They try to prepare for new job responsibilities, to cope with growing children, and to assume greater organizational leadership. Many institutions sponsor educational programs to help adults to change (Houle, 1972). Schools and colleges offer evening and off campus courses, employers provide job training programs for their employees, professional associations conduct weekend conferences for their members, and community organizations provide leadership training (Knowles, 1970). There are many ways in which people help adults to learn in these educational programs. Facilitators of learning make presentations, lead discussions, and arrange for demonstrations. Most of those who facilitate adult learning do not do so full time, and many are not primarily teachers. Most of the time, they are nurses or lawyers, clergymen or homemakers, work supervisors or realtors, union leaders or nursing home operators.

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This essay was prepared for those who have some experience helping adults to learn. It presents ideas that may contribute to a more effective helping relationship. The way in which the mentor role is best performed in a specific instance depends on various factors. Some are characteristics of the learners such as age, experience, and level of formal education. Some are characteristics of the educational program such as sponsor, subject matter content, and the specific facilitative roles that are included in the program. There are, however, some ideas about helping adults to learn that seem to apply in most instances (Houle, 1972). This essay contains a selection of ideas from the organized knowledge related to the facilitation of adult learning. References to the relevant literature are included throughout and a selected bibliography is provided at the conclusion of the essay. Hopefully, the essay can assist those who perform the mentor role to alternate between some of the action problems that they confront and some of the knowledge resources that can help them to improve their performance.

Mentor Role

Successful facilitators of learning seem to have three types of understandings. They understand what is to be learned, they understand the learners, and they understand useful procedures to help the learners build on their present competencies to achieve their educational objectives. The people who facilitate learning most successfully, not only understand each of the three quite well but they can put them together well (Rubin, 1971).

A better understanding of the mentor role should result in a more insightful identification of the major decisions to be made and a more effective approach to doing so. Most of these decisions cluster around five components of the mentor role, which deal with learners, setting, objectives,

activities, and evaluation (Knox, 1973). They are not steps but components whose inter-relationships must be considered, and the planning or improvement of a continuing education episode can begin with any component and proceed to relationships with each of the other components until all have been taken into account. Decisions regarding all of these components occur during both the planning and the conducting of educational programs and attention should be given to them throughout the process (Houle, 1972). These components of the mentor role apply when someone is planning and conducting a learning episode for himself, for another individual, or for and with a group of adults.

Learner characteristics - An adult is more likely to change if a gap is identified between his or her actual present behavior and a changed behavior that seems more desirable. The behavior may be knowledge, skill, attitude, or actual performance. It may be understanding how a car engine works, being able to rebuild a carburetor, appreciating the work of a skilled mechanic, or being able to do an engine overhaul. One way to specify desirable behavior is to define it as an attainable ideal as personified by people who perform it very well. The successful concert pianist serves as a role model for the music student. Their excellent performance can be compared with that of the potential learner to identify the gaps. This comparison serves two purposes. One is as a basis for the selection of educational objectives and learning activities to help close some of the major gaps. The beginning golfer watches the pro to help improve a stroke. The second purpose is to encourage the potential learner to become committed to narrowing the gap by a change in his behavior. Familiarity with the performance of an experienced realtor can inspire a beginning real estate salesman to study for his license. Someone who wants to facilitate adult learning can help to appraise educational needs by assisting the learner to understand the rationale, to use the procedures,

and to recognize attainable standards of excellence to compare with his actual present performance. This component of the mentor role contributes especially to the setting of objectives. Background information about adults as learners, typical needs, and dynamics of learning can sensitize those who facilitate learning to ways in which their help is most likely to be effective (Knox, 1968a; Tyler, 1950; Bischof, 1969; Birren, 1964; Kidd, 1959; DeCecco, 1968; Sjogren, 1965).

Awareness of Setting - A learning episode for an adult typically occurs within a societal context that also influences his performance of his major life roles in family, work, and community. A second component of the mentor role is becoming aware of the major influences in the setting and harnessing some of them so as to increase the likelihood of personal growth and change. The service strivings in the membership of an institute for retired professionals results in members being not only the learners but also the facilitators of learning. There are three types of contextual influences on continuing education that the learner should be helped to recognize and use. One type of influence is the set of criteria against which the effectiveness of continuing education is judged. Examples include increased professional effectiveness, improved family nutrition, greater participation in cultural activities, or higher employment rates. The learner can use these criteria as reference points for short term goals and assessment of progress (Faure, 1972; Knox, 1968a; Knox, 1973; Riley, 1968). Another type is the set of positive influences and resources that encourage participation in continuing education. Examples include a favorable image of continuing education, encouragement by program sponsors, and available educational materials. The learner can use these sources of encouragement as aids to progress and boons to motivation (Rogers, 1971; Knowles, 1970; Riley, 1968).

A third type is the set of negative influences that serve as barriers to participation. Examples include competing activities, high costs, fear of failure, and an overwhelming welter of possible objectives. The learner is more likely to offset these negative influences if he recognizes them (Knox, 1968a; Johnstone, 1965).

Setting objectives - The adult typically confronts far more gaps to be narrowed by continuing education than he can attend to. Priorities must be set, if only by default. The third component of the mentor role is the selection of objectives upon which to focus continuing education activities. The selection process includes a review of sources of objectives and a listing of the major objectives that might be attended to. Sources of objectives include analysis of their own role performance, opinions of peers, consideration of current personal and social issues, and recommendations of experts. The selection of objectives in which to invest time and attention, typically takes into account the desirability of closing the gap and the feasibility of doing so, even with assistance (Tyler, 1950; Knox, 1968a). A middle-aged learner may decide that learning to play chess has the highest priority as an educational objective at the current stage of his or her family and occupational life cycle. Someone who helps to facilitate the learning of another adult confronts the additional task of achieving a satisfactory match between his own expectations and those of the learner. Although a facilitator of learning may have a greater understanding of that which is to be learned, the expectations of the facilitator should not be imposed on the adult learner. Instead, the early part of each learning episode should be devoted to objective setting. A typical procedure is agenda building for the session. In the process of agenda building, consensus is achieved. When there is substantial agreement and objectives are straightforward, the objective setting

phase may take but a few minutes. Up to one third of the available time can be devoted to objective setting and still accomplish more learning achievement than when objectives are inadequately understood and agreed upon.

Learning activities - The most evident component of the mentor role deals with the learning activities themselves. Learning occurs mainly as a result of an interaction of individuals with new information or experiences. This interaction typically takes the form of activities such as reading, listening, writing, discussing, and viewing. These activities have been developed singly and in combination in dozens and dozens of learning methods (Bergevin, 1963; Knowles, 1970; Miller, 1964; Morgan, 1963; Rogers, 1971). This component of the mentor role consists of the selection and organization of learning activities to achieve the educational objectives and to fit the learning style of the individual learner. Some learning activities are more likely to enable the learner to develop a competent level of performance and the commitment that results in a "refreezing" of new habit patterns and subsequent utilization of the new area of performance. These types of learning activities usually include opportunities for the learner to practice the new area of performance in settings similar to actual performance. Examples include role playing and case analysis. The main criterion for the selection and organization of learning activities is the achievement of the specific educational objectives that were selected as of high priority. This fitting of activities to objectives should take into account both the content that is being learned and the behavior of the learner that is to be changed (Tyler, 1950, p. 28-30). Another criterion is the fit between learning activities and the learner's preferences and style of learning (Whipple, 1957). Some adults strongly prefer to encounter a highly structured presentation by an acknowledged authority, such as a

recorded lecture on a tape cassette. Some other adults strongly prefer a less structured way of exploring the same content, such as an informal discussion with knowledgeable peers. If each is able to use materials and activities that fit his preferences, it is likely that his motivation and the learning outcomes will be greater.

Evaluation - The remaining component of the mentor role is the process by which persons associated with the educational activity make judgements about effectiveness based on evidence in ways that encourage use of the conclusions to improve the educational activity (Knox, 1969). These judgements are made by the learner himself and by those who try to facilitate his efforts. The main type of judgement is a comparison between expectations and performance. Did the homemaker learn as much about nutrition as she expected to? There are several aspects of the educational activity that might be the focus of evaluation. Was the scope of the educational objectives too broad, too narrow, or just about right? Did the gaps that were identified turn out to be among those with the highest priority? Were the learning activities planned so that they fit well with other commitments and personal preferences? Were the benefits of the continuing education activity worth the investment of time, money, and effort?

In the remainder of this essay, each of these components is considered in turn. The component on learners is divided into two sections, one on dynamics of learning and one on awareness of needs. The component on learning activities is divided into two sections, one on selection from the range of activities and one on the organization of learning activities. In each of the resulting seven sections that follow, major ideas have been selected from the organized knowledge regarding continuing education of adults. Following each of these major ideas, there are suggestions about

ways in which the ideas can be used to facilitate learning by adults. The concluding section of the essay suggests ways in which mentor role performance can be improved by those who facilitate adult learning.

Dynamics of Learning

In trying to better understand adult learners, it seems helpful to consider two bodies of knowledge dealing with learning and with needs (Bischof, 1969; DeCecco, 1968). The body of organized knowledge dealing with learning includes generalizations about the conditions under which adults with various characteristics learn effectively (Kidd, 1959; Botwinick, 1968). The body of organized knowledge dealing with awareness of needs appraisal includes generalizations about the types of needs that most adults have in educational activities, which transcend the needs of a specific adult or group of adults that relate to the specific educational objectives. This section contains generalizations about adult learning and the subsequent section contains generalizations about awareness of needs.

1. Performance - Adult learning usually entails change and integration of knowledge, skills, and attitudes to produce improved performance. Adults typically engage in a continuing education activity because they want to use what they learn soon after they learn it. There are small adult life cycle shifts from an emphasis on acquiring skills in young adulthood, to knowledge in middle age, and to attitudes as adults grow older. Therefore, those who help adults to plan and conduct a learning episode should give attention to the most desirable mix of emphasis on changes in knowledge, skills and attitudes as intended outcomes. For example, in some episodes the intent is to acquire an appreciation of modern

dance while in other episodes the intent is to develop skill in dancing.

2. Motivation - The motives that cause an adult to devote his time and attention to a learning episode are and should be a major determinant of learning outcomes. Because participation is voluntary, if the activity does not fit his expectations the adult will typically withdraw. The educational goals, sources of encouragement, and barriers that characterize an adult's life space shape his reasons for participation. Motives are multiple and varied in their specificity and in the extent to which the learner is aware of them. Overly intense motivation becomes anxiety which interferes with learning. Therefore, those who facilitate adult learning should provide freedom for the learners to creatively explore within democratic limits, should encourage them to go beyond the meeting of apparent needs, and should facilitate efforts by learners to set realistic educational objectives for themselves.

3. Meaning - Adult learning is more effective when it entails an active search for meaning and discovery of relationships between current competence and new learnings. Active participation in learning includes interaction with realistic and relevant materials, which does not necessarily require overt action but may consist of looking and listening. Interaction with realistic educational materials facilitates both motivation and application. Recall is best when material is learned in a context that is similar to the one in which it is to be used. Because of the wide range of individual differences between adult learners, varied learning

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activities may be required to achieve similar objectives. There is an adult life cycle shift in general personality development and major role changes from a concern with occupation and growing family by young adults to broader historical, philosophical, and social issues by older adults. Therefore, to effectively facilitate adult learning it is important to respect and understand the unique search for meaning of each learner as a basis for helping him to interact with relevant materials and activities. The learner is in a unique position to select materials that are most relevant and to suggest the new learnings that would build best on current competencies.

4. Experience - An adult's prior experience influences his approach and effectiveness in a learning episode. Between twenty and sixty years of age the range of individual differences increases. Prior learning may facilitate, interfere with, or be unrelated to new learnings. With age, unlearning skills become more important. Higher levels of education typically provide more extensive cognitive structures that facilitate mastery of conceptual tasks. The adult with a master's degree that includes political science and economics courses is likely to have acquired some general concepts about our political and economic system that can undergird the new ideas that he confronts in a management development program on current social issues. Disuse of learning skills for many years results in reduced learning effectiveness, part of which can be restored by participation in continuing education. Therefore, the design of effective learning experiences for an adult should take into account his individual background and

establish connections between the new learnings and his relevant prior knowledge and experience.

5. Ability - Learning ability is relatively stable between twenty and fifty years of age, with gradual decline thereafter; abilities that are associated with adult experience, such as vocabulary, are best maintained and enhanced; and the initially most able adults tend to increase their ability slightly while the initially least able adults tend to decline in ability so that the range in abilities increases with age. Adults with the greatest learning ability tend to learn more rapidly and to more readily learn complex tasks. Longitudinal studies based on data from the same people collected at succeeding ages indicate less decline than cross sectional studies based on data from people at various ages collected at the same point in time. For some older adults, ill health may substantially reduce learning ability. Therefore, those who facilitate adult learning should make careful estimates of the learning ability of individual adults, and take this estimate into account in setting objectives and planning learning activities.

6. Memory - An adult's ability to remember information to which he is exposed depends on the strength of the registration and on the factors operating to erase the registration. The strength of registration depends on intensity, frequency, and importance to the learner. The factors that erase the registration include the passage of time and the activity that follows the exposure. Both learning and forgetting are associated with learning ability, physical condition, and cognitive structure. With increasingly older age groups, a higher proportion of adults experience memory

impairment in which it takes longer to register impressions and in which memories decay more rapidly. Pacing is especially important for immediate recall by older adults. Recall is best under conditions that are similar to the original registration. Therefore, those who help adults to learn should help to design learning activities that optimize both acquisition and retention.

7. Condition - An adult's ability to learn can be substantially reduced by poor physical and mental health. Condition and health include both gradual decline into old age and temporary problems. An example of a gradual decline is a hearing loss. An example of a temporary health problem is having the flu for several weeks. The decline for older adults in their ceiling capacity of sensory input, especially vision and hearing, can affect learning. Much of this decline before very old age can be corrected for by glasses, better illumination, hearing aids and sound amplification. Some physical health conditions, such as circulatory disease, reduce learning functions such as memory. Some mental health conditions, such as anxiety, produce physical changes that interfere with learning functions such as concentration and memory. Older adults who are in excellent health and condition learn better than most middle age adults. Therefore, those who facilitate adult learning should help to create a learning environment and procedures that minimize the extent to which problems of poor health and condition interfere with learning, such as providing excellent illumination without glare, sound amplification, and minimum stress for older learners.

8. Pacing - Adults typically learn most effectively when they set

their own pace, when they take a break periodically, and when the distribution of learning episodes is fitted to the content. Adults vary greatly in the speed at which they learn best. Older learners tend to reduce speed of learning and to give greater attention to accuracy. If an adult is forced to proceed much faster or slower than his preferred pace, his learning effectiveness typically declines. For older adults, much of the decline in educational performance is attributable to a deficit due to speed instead of a decline in learning power. Therefore, learning activities for adults should be planned so that each adult can discover his optimal pacing and proceed at that rate.

9. Complexity - An adult typically learns best when the learning task is complex enough not to be boring but not so complex that it is overwhelming. If this is done, it tends to minimize initial mistakes that sometimes have to be unlearned. Older adults especially tend to learn more difficult tasks less well and are more readily overwhelmed by irrelevant information. Therefore, persons who facilitate adult learning should build more complex learning tasks on more simple ones and simplify more complex tasks by use of materials such as diagrams, models, and written instructions.

10. Content - The process of effective learning by adults varies with the content or nature of the learning task. For example, practice and rehearsal is essential for skill mastery and memorization, social or verbal learning that entails consolidation or reorganization of previous learning can be accomplished in a few trials, a specialized diagnostic procedure can be effectively

learned by self-directed learning activities with the procedure, and more effective interpersonal relations are typically best learned in a group setting. Therefore, those who facilitate adult learning should consider the nature of the learning task and take into account the dynamics of learning that apply especially to that type of task.

11. Feedback - Adults learn more effectively when they receive feedback regarding how well they are progressing. This applies to learners of any age. Knowledge of excellent performance provides a goal for learning efforts. Knowledge of the learner's own performance helps him to locate himself regarding progress in the educational activity. If the feedback is discouraging to the learner, consideration should be given to modification of the learning task. Immediate feedback, recognition, and reward helps to shape and reinforce new learning. Positive reinforcement (reward) is far more effective than negative reinforcement (punishment). Therefore, effective procedures to facilitate adult learning should include feedback regarding the progress he is making to close the gap between current and desired performance.

12. Adjustment - Adults typically learn less well when they experience substantial social or personal maladjustment. Such maladjustment is usually associated with anxiety and defensiveness and should not be confused with moderate levels of arousal and motivation. When an adult believes he can deal with a situation it may be a challenge, when he does not it may be perceived as a threat. Adults deal best with the failures they confront in learning situations when they have experienced many successes. Adults

with few recent educational experiences tend to be most apprehensive about the fear of failure and most discouraged by the experience of failure. Therefore, those who facilitate adult learning should provide support and guidance, minimize maladjustment, and especially emphasize learning success by adults who are less familiar with continuing education.

Those who want to effectively facilitate adult learning should consider these generalizations about dynamics of learning and reflect on how they relate to their own practices in helping adults to learn. It should be reassuring if generalizations and practices are consistent. If they are not, some reflection on why not will often suggest ways to improve practices (Burton, 1958; Knox, 1968; Knox, 1964; Rogers, 1969; Rogers, 1971; Tough, 1967).

Awareness of Needs

In addition to the dynamics of learning, a second characteristic of adults which the effective facilitator of learning understands, is needs. Those who facilitate adult learning will be more likely to be effective if they are alert to the needs that influence participants in continuing education generally. In this section of the essay, some of the organized knowledge regarding educational needs of adults is reviewed. This information is grouped in relation to four concerns of those who facilitate learning--attraction, intake, support, and retention (Bischof, 1969; Bloom, 1964; DeCecco, 1968; Havighurst, 1956; Johnstone, 1964; Knox, 1968a; Neugarten, 1964; Neugarten, 1968; Riley, 1968; Rogers, 1969; Rogers, 1971; Whipple, 1956).

Attraction - Most adults who decide to participate in an educational activity do so because the several influences that encourage them to do so are collectively stronger than the several influences that discourage them. An adult participates in an activity because he prefers to do so instead of something else he might have done. An evening course on conversational french seems preferable to a bridge club. To even consider an educational activity, an adult must know about it. An adult is more likely to pay attention to information about a continuing education activity if he receives two types of messages. One is about the extent to which a program deals with a topic that impinges importantly on the life of the adult. The young wife who is expecting her first child suddenly becomes interested in many sources of information about baby care. No relevance, no interest. The second is about the extent to which participation in the adult education program would be likely to make a difference in the way in which the adult relates to the topic or domain of life. A series of sessions on baby care must contain new information. Typically the decision to participate occurs only when both types of information are encouraging. For such information to be received, it must be available through channels that the adult uses to seek information about education. For example, adults with little formal education are unlikely to know someone who is already participating in the educational program and are not likely to attend to the mass media as a source of information about educational decisions (Johnstone, 1965).

Some of the facilitators of participation are mainly personal and internal to the potential learner and some are situational. Some of the personal influences are reasons for participation of which the learner is aware (Houle, 1972; Tough, 1967). The major reasons are listed below:

1. To achieve a personal occupational goal (new job, job improvement, prepare to teach)
2. To achieve another type of personal goal (organizational leadership, gain attention)
3. To reach a social goal (help children study)
4. To reach a religious goal (understand doctrine)
5. To understand (satisfy curiosity, satisfaction from knowing)
6. To participate in social activity (enjoy being with participants)
7. To pursue personal fulfillment (enjoyment of learning activity)
8. To meet formal requirements (prepare for examination, make up for missed formal education)
9. To escape (captive wives, troubled youth)

In addition to such explicit reasons, the decision to participate is influenced by pervasive motives and needs such as need for achievement. Other personal facilitators include liking for school, interest in ideas, and reading orientation. Situational facilitators include encouragement by friends, work experiences and expectations that emphasize more education, and high congruence between learner aspirations and educational program objectives. A source of heightened readiness to learn is the individual's reaction to major role change events such as birth of the first child, job change, move to a new community, retirement, and increased organizational responsibility.

Barriers to participation include lack of time, lack of money, lack of confidence, scheduling conflicts, and problems of transportation.

In summary, the likelihood that an adult will decide to participate in a continuing education program is associated with his perception of the following factors.

1. The importance to him of the aspect of life to which the educational program relates (job improvement, help children).
2. The extent to which he wants to increase his competence in relation to the aspect of life (become more effective in organizational leadership roles).
3. The extent to which education is seen as an effective way to increase competence (belief that more effective interpersonal relations can be systematically learned).
4. The fit between his life style and the anticipated patterns of program participation (the general program image is one for people like himself).
5. The balance between the anticipated benefits and the anticipated costs of participation (that which will be learned about accounting is worth the tuition and time spent).
6. The external sources of encouragement (significant others think it's a good idea).

Intake - Especially for adults without much recent experience in educational programs, their initial encounter with a learning episode typically has a major impact on their success and persistence. Those who facilitate adult learning confront two challenges during this intake or orientation period. One challenge is to help the learner to feel accepted and welcome in the program. The second challenge is to assist the learner to achieve at least one important educational objective. Such an initial social and educational success can do much to offset some of the difficulties that typically accompany most efforts to change.

Although those who would be most anxious in an unfamiliar educational activity seldom enroll, many adults who do enter the experience do so with an apprehension of the unknown and a fear of failure. One of the basic needs of most people is to maintain and enhance their self concept. For many adults the image of the student role based on their earlier school experience is a subservient one which seems incompatible with their image of responsible adulthood. For older adults, this image is often combined with an erroneous belief in a major decline in learning ability with age. An effective facilitator who helps an adult learner to have an initial success experience can do much to increase the learner's sense of educational efficacy and his confidence in his learning ability. There is, however, wide variability among adults in their optimum level of arousal or stimulation. This makes it doubly important that the facilitator have a counselor or tutor orientation. Learning success and individualized stimulation can assist adult learners to become more venturesome and attentive in a learning episode. An older adult who has achieved some success and recognition in a series of learning episodes is likely to seek more ambitious educational objectives. The purpose of the intake process has been achieved when the learner has recognized his need to know and has acquired sufficient feelings of security to venture to change (Rogers, 1969). Sometimes by discussing past learning episodes and by talking about plans for the learning episode being started, the inexperienced learner can better understand the total process by which the facilitator can help him to learn. In some instances, the intake process can help to unfreeze the thought and habit patterns so that the adult participant becomes more receptive to change and identifies questions to be answered and problems to be solved.

Support - Many adults need some support and encouragement throughout a learning episode. This is especially so for adults whose amount and recency of formal education is quite limited. Recognition and reward are important and they can be provided by other participants and by a facilitator. The greatest support often results from the achievement of small successes. A facilitator can increase the likelihood of such success experiences by aiding with realistic goal setting and by aiming for multiple outcomes in case some don't materialize. For some adult learners, a growing recognition of the important ways in which they can use their increased competencies, can be very supportive. A facilitator can provide support by attending to individual participants, to small groups with similar needs, or to an entire group. A major way in which a facilitator can provide encouragement and support is to minimize the extent to which the learner has failure experiences and to help the learner to learn from them when they do occur. Ways to help minimize failure are to allow learners to progress at their own rate, to use the learner's own prior performance as the reference point for evaluating progress, to work through mistakes with the learner when they do occur, and to use gentle humor to soften learner concern about errors. Other participants can also provide much group support. Such emotional encouragement and social support can help learners to maintain and enhance their self concept at a point when those with little recent educational experience are likely to lack confidence. Often, by performing some of the tasks of the mentor role for himself or other participants, a learner can become more confident and assured.

Retention - To attract an adult to an educational program only to have him drop out right away is worse than never having established contact because usually the residue of disappointment and feelings of failure will

make it more difficult to attract him the next time. Those who facilitate adult learning can achieve a higher retention rate if they understand the process of persistence and withdrawal. The retention rate, consisting of the percentage of those who enroll who successfully complete the program, varies greatly with the type of continuing education program. The typical retention rate is as high as ninety-five percent for a one semester university graduate evening course, will range between fifty and eighty percent for many programs, and may be less than twenty percent for some home study programs with indefinite time limits and little external encouragement. The likelihood of a high retention rate is associated with a careful match between participant aspirations and program characteristics, participant's level of education, participant's investment in the program (monetary and psychic), and shortness of program. Outside influences such as family problems, work conflicts, and disinterest or discouragement by friends tend to lower the retention rate. Influences such as liking for learning activities and facilitators and participants, and a sense of accomplishment, tend to increase the retention rate. In general, about half of the participants who withdraw before successful completion, do so for reasons unrelated to the educational program. This reflects the higher priority that most adults assign to responsibilities in family, work, and community than to educational participation. Some programs have flexible scheduling arrangements to accommodate these competing demands. In some programs, tactful reminders to those who miss a session help to express interest and raise retention. Records of retention rates can be used diagnostically. It takes just a few minutes to write a few post cards or make a few phone calls each week. If a program has a much lower retention rate than anticipated, program evaluation procedures should be used to find out why and to make program improvements

if possible. Detailed information from a sample of former participants who dropped out can be used by a facilitator to identify changes he might make to increase the retention rate.

Setting

Effective learning episodes for adults are not planned and conducted in the abstract but occur for specific learners, within the context of specific times, locations, and circumstances. The facilitation of adult learning should take this setting into account. In doing so, attention should be given to characteristics of sponsor, other participants, scheduling, and the setting in which increased competence is to be applied (Houle, 1972; Knowles, 1970; Faure, 1972).

Most adult learning episodes that entail a facilitator also entail a sponsor such as an educational institution, an employer, a professional association, or a religious institution. Such a sponsor has resources, constraints, and expectations that should be considered by a facilitator. The resources include resource persons regarding both content and process; educational materials and equipment such as books, films, and audio tapes; facilities such as classrooms and laboratories; and opportunities for practicum experiences. Facilitators should be aware of the available resources so that they can select those resources that best fit program objectives and learner characteristics. Sponsors also impose constraints, such as location, timing, admissions requirements, and minimum standards for successful completion. Facilitators should consider such constraints so that they do not unnecessarily restrict program development. Sponsor expectations are reflected in public statements, program priorities, staff selection, as well as in statements of program objectives. These expectations

can serve as guidelines for the planning or modification of a specific learning episode.

The characteristics of the other participants provide another important part of the setting for group learning activities. As the number of other participants increases, so does the program complexity for the facilitator, but so also does the range of resources that the individual learner has potentially available from the other participants. The range of individual differences within most adult groups is great, and becomes greater with age, at least until age sixty. These differences include most characteristics related to learning including learning ability, interests, temperament, relevant experience, level of education, and recency of education. By use of selection criteria and by use of sub-groups of similar participants, a facilitator can increase the similarity of the adult participants with whom he works at a given time. However, for some programs in which participants can learn much from each other, it may be desirable to increase the range of individual differences.

The setting often includes restrictions or traditions regarding scheduling. When this does occur, it tends to specify a sequence of learning episodes within which the total educational program is planned. For example, in some agencies, a series of about fifteen weekly sessions of three hours duration is almost standard. In centers for continuing education, the three-day residential conference is typical. When the total time allocation is set, this "given" tends to specify the objectives that are likely to be achieved in the available time. Even when the total time is not set, a balance is usually struck between the benefits that can be achieved in terms of breadth and depth of coverage, and the costs in the form of time spent by participants and facilitators.

Some continuing education programs take place in the same setting in which the participants can apply what they learn. Examples include on-the-job training, organization development programs sponsored by employers for their employees, an educational program for residents of a home for the aged, or a clinical seminar related to an action setting. Especially in such instances, a facilitator should carefully analyze such settings as a source of needs, evaluation of progress, and evidence of accomplishment.

Setting Objectives

The facilitation of adult learning is more likely to be effective if there is at least moderate similarity between the aspirations of the learner and the purposes of the facilitator. The setting of educational objectives is the process by which a satisfactory congruence of expectations is achieved.

Most adults enter a learning episode with some aspirations and expectations. One function of a facilitator is to help the learner to consider the range of educational objectives from which to select those on which he will focus. The facilitator is often aware of objectives that the learner may eventually recognize as more important to him than the objectives that brought him to the learning episode. A helpful way to encourage the learner to consider a wider range of objectives is to discuss the possible outcomes or benefits that the learner anticipates along with the expectations of other learners in similar educational programs. In a group session, this can be accomplished by the process of agenda building. The participants and the facilitator each mention the topics that they would like to discuss or the competencies that they would like to acquire. The resulting list tends to be broader than any one member of the group would have produced.

Such a list of topics or objectives is usually more extensive than the time available for the learning episode so some selection is needed. In the process of agenda building, the list of topics or objectives can be reviewed with the group of learners and those topics selected which are of the greatest interest for the most participants. Other criteria that a facilitator might use in the selection of objectives include the purposes of the sponsor, the prior experience of the participants, the opinions of experts, and his own convictions about the relative importance of topics and objectives. Two benefits of heavily involving participants in this process are that they gain experience in the setting of realistic objectives, and that they are more likely to have a strong commitment to the achievement of the objectives.

A clear statement of educational objectives reflects the behavioral changes that the learners expect to experience. In some instances, the clarification of the ways in which an adult wants to change and a commitment to do so may be the main ingredient in making the change. Behavioral objectives reflect both the content that the learner will learn more about (real estate practices, food preparation, weaving, or philosophy) and the type of behavioral change that is to occur (appreciation, familiarity, understanding, analysis, skill). If the educational objectives are clear at the outset of a learning episode, the learner can be more self directed in guiding his own learning activities.

It is appropriate that objectives change during the course of an educational program. The learner is engaged in a search for meaning. As he learns more about a topic, his new insights can cause a shift in the focus of his learning interests. An effective facilitator should periodically encourage the learners to consider their educational objectives as they

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proceed. This is especially important for longer educational programs that consist of a series of learning episodes (Tyler, 1950; Burton, 1958; DeCecco, 1968; Houle, 1972; Knox, 1973; Rogers, 1971).

Learning Activities

There are many learning activities from which a learner and a learning facilitator can select. The selection depends on the educational objectives, learner characteristics, and the shifting emphases that should occur as part of the flow from the beginning to the middle to the end of a learning episode or series of episodes. This flow should typically reflect the desirability of modifying old habits and gaining commitment to change at the outset, achieving change during the main part of the episode, and developing commitment to maintenance and use of the new competence as the culmination of the program. This section of the essay contains brief descriptions of a few types of learning activities. All of them emphasize the relating of new learnings to adult experience. They vary, however, in the purposes for which they are best suited. The seminar is effective for the rigorous analysis of ideas. The workshop builds well on the experiences of group members. The case study facilitates analysis of process. Buzz groups provide a quick way to obtain a listing of preferences, reactions, or questions. Role playing provides an opportunity to experience and analyze both the dynamics of an interpersonal situation and the feelings that are aroused under these circumstances. Sensitivity training helps the learner to better understand the way in which he functions in group settings. The in-basket procedure provides a standard exercise for the analysis of decision making procedures. Facilitators of learning are more likely to select the most appropriate method if they are familiar with the available range.

Adults seek to achieve educational objectives within four types of settings in which the teaching-learning transaction occurs, individual, group, organizational, and community. The individual setting includes correspondence study, E.T.V. courses, and one-to-one coaching or counseling. The temporary group setting includes the typical evening class in which adults without previous contact assemble for the class each week and at the end of the course go their separate ways. The organizational setting includes in-service training for work groups in which the prior and subsequent working relationships between the learners have a major influence on the program. The community setting emphasizes working relationships between different organizations and segments of a neighborhood or community. Within each of these four settings, the balance of responsibility for planning and directing the learning experience may rest with the facilitator, or with the learner, or at some intermediate point of shared responsibility. In combination, these two dimensions of setting and locus of responsibility provide a basis for the classification of types of teaching-learning transactions that is provided in the following Table. The illustrative methods in each of the cells of the matrix do not occur exclusively in that category but instead typify the characteristics of the category.

Table: CLASSIFICATION OF CONTINUING EDUCATION LEARNING-TEACHING METHODS

SETTING	(Primary responsibility for planning and directing learning activities)			
Category	LEARNER	LEARNER (facilitator)	FACILITATOR (learner)	FACILITATOR
INDIVIDUAL Interpersonal	group visits	non-directive counseling	supervisory coaching	Psycho-evaluation, demonstration
Mediated print	self directed reading on topic	library readers advisory service	correspondence course	How-to-do-it book
Electronic	select related films, T.V. programs	film forum	T.V. course with materials, phoning	T.V. course, no materials
TEMPORARY GROUP Small	study-discussion	brainstorming, seminar, workshop	case study, role play	lecture-discussion, process demonstration
Large	problem clinic, buzz groups	listening panel, lecture from problems presented	lecture-questions, interview resource person	lecture, forum, panel, symposium
ORGANIZATIONAL Small	informal staff study groups	staff meeting series on organizational problems	training sessions for work teams	discuss management consultant's recommendations
Large	organizational self study	educational community development, organizational conference	action research	members react to proposal for organizational change
COMMUNITY Small	community problems discussion group	action seminar	demonstration project	technical briefing of community leaders on issue
Large	field trips to other segments of community	result demonstration	community survey	lecture series on community problems

Most learning episodes include the use of some educational materials. In some episodes, such as a correspondence course lesson or a programmed instruction chapter, interaction with the materials constitutes the main vehicle for learning. In some episodes, such as sensitivity training, the emphasis is on interaction with other people. In these episodes educational materials, such as orientation sheets or reaction forms, perform a supplementary function. Persons who facilitate adult learning can use educational materials to develop and focus interest, to assemble pertinent information to which the learner can refer, to help to structure practice and rehearsal activities, and to assist the learner to visualize or conceptualize the basic parts of that which is to be learned. Educational materials should clearly convey the basic ideas without extraneous and sometimes confusing detail, and they should allow individualization. One way to achieve individualization is to allow the learner to select items that are especially relevant. Another way is to use materials in relation to a tutorial role such as coaching in which the tutor helps the learner to adapt the materials for his own use. Persons who facilitate adult learning should plan educational materials so that the learner has greater freedom to learn, not less.

A main criterion for the selection of learning activities is the set of educational objectives to be achieved. For example, if the objectives predominantly entail acquisition of information, then the learning episode should include activities such as discussion or testing to discover the learner's existing cognitive structure related to the topic and viewing a film or reading a book so that the learner can build new information on his current knowledge. If the objectives are predominantly skill development, then the learning episode should include activities such as simulation or

coaching so that the learner can practice the skills he is trying to develop. If the objectives are predominantly attitude change, then the learning episode should include activities such as discussion or role playing so that the learner can explore his feelings and those of others in a climate of stimulation and social support that is conducive to change of attitudes. Persons who facilitate adult learning should understand which types of activities tend to be most effective for the achievement of various educational objectives and help the learners to select those activities that best serve their purposes.

SEMINAR

As an instrument of small-group learning, the seminar makes two basic demands: that each member contribute materials representing his own original thought or research, and that the group utilize these materials in an act of cooperative reflection. The seminar sometimes requires individual research; the less formal seminars which sometimes bring together people of high status in science or politics, often ask their members to contribute papers which express a range of opinion on a particular issue.

As an educational tool, the seminar provides a first-rate opportunity for giving learners practice in complex cognitive skills. Two of these objectives are perhaps particularly suited to the seminar form: problem-solving and the improvement of perspective. The climate of small-group deliberation favors the discussion of a particular problem, a process which is improved when a participant contributes a preliminary analysis and a personal judgment. In the second instance, if each of the participants is working on aspects of the same area, the group has available over a period of time a wider range of viewpoints than any one of its members had previously been forced to consider. The opportunity for the learning facilitator to help the group construct an image of a broad judgment scale which includes all of their judgments and to lengthen it further by inferring positions which are not present within the particular group, is an obvious and extremely valuable one (Miller, 1964, p. 98, 99).

WORKSHOP

A total workshop should be divided into small groups based upon the interests of the participants. An effective interest group is made up of eight to twelve adults. They are assembled because they want to work on the same general problem, although the specifics of what they are going to do remain to be established. The general problem has been evolved from them. This is of the utmost importance even if the facilitator knows from the beginning what general area would emerge. Everyone in the group is there of his own free will. The group he joins is up to him. He is allowed to work alone if he insists. The situation is so arranged that the specific group goal is worked out by those who hope to achieve it. There is an opportunity for each participant to make his unique contribution to the good of the whole, and to assume responsibility for it. There is opportunity for planning, so that whatever each participant does will make sense to him. There is a chance for leadership to emerge, not only in the one or two people who assume the chairmanship, which is a superficial evidence of leadership, but among the whole group. For each will be leader when he has a unique contribution to make, and each will be follower when he learns from another.

Ordinarily the group chooses a chairman and a recorder. It is not always necessary to have a chairman, and groups have been known to succeed well without one. The smaller the group and the better its members know each other, the less likely are they to need a chairman. If the group is large, the members known to each other little, and the problem amorphous, then the choice of a chairman is essential (Keiley, 1951, p. 28, 29).

CASE STUDY

The case is particularly appropriate for study in personal and social problem areas. The concentrated analysis of case materials repays the effort necessary to develop good cases. Case materials used for practice in applying principles do not require a high degree of complexity and may often be constructed out of events reported in news stories or may simply be contrived instances.

Recent adaptations of the case study method in business education have stressed improving decision-making skills. Participants can be assigned the task of constructing a case of their own by selecting a relevant incident, gathering data about it through interviews and documentary research, and tracing the natural history of a decision with which they had some connection. Some decision-making cases often turn out to be useful only by providing an opportunity to examine the role of power relations in a particular situation. To avoid confusion it is best to present them as such in the first place.

Case materials often provide dramatic examples of value conflicts, which enable a group to think through the structure of values embedded in a situation without the confusion produced by their own ego-involvement. For this purpose, even the simplest outlines of a situation are sufficient to produce lively and useful discussion (Miller, 1964, p. 102, 103).

BUZZ SESSION

A buzz session consists of an audience divided into several small groups, meeting simultaneously, to discuss a topic or perform a task assigned them. The small groups (buzz groups) meet for a relatively short time and for uncomplex purposes--such as developing one or two questions to put to a speaker.

During the meeting, the chairman:

a. Explains the purpose of the buzz session and how the audience is to be divided, asking the audience to begin discussion soon after groups are formed.

b. Helps to divide the audience into groups of about 5 to 15 persons, the group members facing each other in a circle;

c. Suggests that group members spend a minute or two to get acquainted with each other;

d. Sees that each group appoints a leader and a recorder;

e. Restates the assignment--exactly what each group is expected to do and the length of time for discussion (about 10 to 20 minutes depending on the circumstances);

f. Keeps the assignment simple--"develop one question," or "agree on one disadvantage," or "make two suggestions";

g. Instructs the groups to begin discussion and cautions them about allowing one or two persons to dominate the discussion;

h. Gives a warning two minutes prior to ending the discussion;

i. Stops the discussion and reassembles the audience;

j. Allows the recorders a moment to edit or re-write the contributions of their respective groups;

k. Has leaders or recorders report their contributions to the total group (unless other plans have been made to make use of these contributions) (Bergevin, 1963, p. 193).

ROLE-PLAYING

Role-playing is a spontaneous portrayal (acting out) of a situation, condition, or circumstance by selected members of a learning group. Role-playing emphasizes relationships among people. Role-playing is done by members of the learning group who try to portray typical attitudes, rather than by persons having special acting abilities. After a problem or situation has been illustrated by role-play, the learning group discusses and interprets the action through the use of another technique such as group discussion. An outstanding feature of role-playing is the emotional impact that comes from observing or taking part in a dramatic presentation. The role-players, and those observing them, usually come closer to an actual experience of the feelings and reactions connected with the problem or situation than they would by reading or hearing an account of it. Role-playing is especially valuable as a technique for getting people in a frame of mind for self-examination (Bergevin, 1963, p. 135).

T GROUPS OR ENCOUNTER GROUPS FOR SENSITIVITY TRAINING

The first major purpose of the T Group is to help individuals to learn how to learn in the areas of self-understanding and relationship with others. The T Group builds on the concept that learning about self and about others comes best from experiences with others and the analysis of these experiences. Analysis of experience, however, requires access to the data about the experience, much of which lies in feelings and perceptions which the individual should recognize and understand. Some of these data, however, are in the possession of others--their perceptions and feelings about a given situation. Learning how to make these data available so that the individuals and the group can learn from them is a major task of the T Group. Each participant should invite and utilize help from others and give help in return.

Thus, the first two T Group goals of learning better how to learn from continuing experiences and learning how to give help to others in their learning and growth experiences are interactive and reciprocal. The third purpose of the T Group is to develop skills of effective membership. The raw data for learning these skills are the actions the group takes toward its goals. As the individual invests himself in group membership, he learns better how to give and accept influence and how to work with others in creating a climate that encourages collaborative problem solving and a process by which it can take place. In so doing, he creates conditions for learning about himself and about others, about the processes of continued learning, and about ways of helping others to learn and grow. He is learning how to become a more effective member.

The unstructured T Group is the crucible in which learning goals

T GROUPS (continued)

can be realized. Through a living and very real experience in earning and bestowing membership and through analyzing this experience, individuals develop sensitivity to group processes and to individual behavior. In so doing they are developing skill for continued learning and for continuing help to others. And they are learning about membership behavior and group process. The integration of these purposes and their interactive influence on one another comprise some of the major purposes of the T Group (Bradford, 1964, p. 213-215).

IN BASKET SIMULATION

An in-basket simulation consists of a set of tasks which present realistic problems of problem solving and decision making that are typical of administrative behavior. The learner is asked to assume the role of an administrator who has been away from his desk for a week and returns on a Saturday morning to find a packet of materials (letters, phone messages, reports, etc.) that had accumulated in his in-basket during the week. The number of hours to be devoted to the in-basket simulation as a part of a continuing education program, is used as a guide to the amount of materials to be included in the in-basket packet and the amount of time the learner is told he is to be in the office on Saturday before going out of town again.

Before beginning the simulation, the learner is given a briefing on the organizational setting in which the hypothetical administrator works including the key people who will be referred to in the simulation. The learner then has to decide how much of his simulation time to use to skim through the packet, which items to attend to and which to set aside for a week, what the major problems are, which items in the packet are relevant to the problems, what decisions should be made during the simulation period, what to write to whom to let them know about the decisions, and which items to forward to other people to ask them to make a decision or to obtain more information. In scheduling an in-basket simu tion as part of a continuing education program, at least twice as much time should be devoted to analysis and discussion of the learner's performance in the simulation as he spends on the simulation tasks. In a typical simulation, an hour is spent on briefing and orientation, two hours on the simulation itself, and three hours on analysis and discussion. Some simplified in-basket simulations have

IN BASKET SIMULATION (continued)

been conducted entirely in a few hours and some very detailed simulations have served as the core of a workshop and have entailed more than eighty hours.

A variety of in-basket simulation packets and related briefing materials have been prepared and have been reported in the literature during the past decade on the preparation of school administrators. The preparation of a new in-basket simulation packet entails the following steps: analysis of the selected administrative role, identification of some typical administrative problems, development of specific incidents based on the problems, preparation of items (memos, reports, messages) from the incidents, preparation of briefing and orientation materials on the organizational setting and personnel, and preparation of guidelines for analysis and discussion of the decisions made by the learner in the simulation.

A major advantage of an in-basket simulation is that all learners who use a specific simulation packet are confronted with the same situation. This allows direct comparison between a learner's approach and the approach of other learners. A single learner can go through an in-basket simulation by himself and at the analysis stage compare his own performance with descriptions of the performance of other persons who have done so. In most instances, a small group of learners work through the simulation together and one of the main benefits is the opportunity to discuss together various approaches to decision making and reasons for the actions that were taken (Hemphill, Griffiths, and Frederiksen, 1962, pp. 46-56).

The foregoing brief descriptions of learning methods illustrate the range from which a facilitator of learning may select in proposing a plan to a group of adult learners. A facilitator who works with adults on a tutorial or coaching basis can modify some of these methods for the individual setting. In addition to the selection of activities that seem to be best suited for the achievement of the objectives, a facilitator of learning should also consider the fit between activities and learner attentiveness. In doing so he can take into account both interest and progression (Knox, 1968). Interest is increased by building on the types of activities with which the learners are familiar, by creating diversity to increase interest but some unity of direction to achieve coherence, and by some change of pace. Progression is achieved by building rapport and recognizing needs early in the developmental sequence of learning episodes, achieving change in behavior in the middle of the sequence, and emphasizing application and support for new learnings in the later episodes (Knox, 1973).

Organizing Learning Activities

After the selection of learning activities that fit both the objectives and the learner, the next step is to organize the learning activities so that the learner progresses well through them and achieves the objectives. This organizing process of the mentor role is as much aesthetic as scientific. The scientific aspect includes generalizations about the conditions under which learners in general learn most effectively. The aesthetic aspect includes attention to the conditions under which specific learners will be encouraged to engage in the learning activity. In doing so, the learner should consider both the way in which he prefers to organize the

sequence of learning episodes, and the main factors that contribute to effective learning by adults.

Adults vary greatly in their learning style and these variations are partly associated with personality. An adult is likely to learn more effectively and to persist longer in the series of learning episodes if the organization of learning activities fits his preferred learning style. Some learners have a very orderly and explicit and initiatory learning style, some depend heavily on external authorities to set goals and provide structure, still others have an intuitive and almost groping learning style that seems disorderly to others. Because of the great variability in characteristic learning styles, it is well to encourage learners to reflect on their previous approaches to learning that have been most satisfactory and satisfying and to incorporate major elements of those approaches in the way in which they organize their own learning activities. There are, however, three principles that might be considered as the learner makes decisions about the organization of his learning activities so as to optimize progression, application, and gratification.

The first principle of organization is progression (Tyler, 1950, p. 62-64). The achievement of educational objectives typically requires persistence in learning activities over a period of time. Persistence is more likely if the learning activities have a sense of coherence and sequence and forward movement, in contrast with brief and unrelated learning episodes. A useful way for the learner to achieve continuity and persistence and progression in learning activities is to select a theme of personal importance to use as an organizing principle. The prime sources of such themes are those areas of life in which there are major gaps between current performance and the performance toward which the individual aspires. Such gaps are likely

to occur when adults cope with role changes such as starting a new job, youngest child leaving home, move to a new community, or retirement. At the time of such change events, the changed performance to which the adult aspires can serve as a convenient reference point for planning. The performance of persons who are now doing what the learner wants to be able to do can be analyzed and divided into components to be mastered by the learner. Sometimes it is best to work backwards from the final performance to the main components upon which it depends. In deciding on a series of learning episodes, decisions should be made about which ones are the most useful prerequisites for other episodes.

The second principle of organization is application. In continuing education, the main reason for behavioral change is to be able to apply the increased competence in the form of improved performance. The likelihood of application is greater if new topics are studied in relation to the context in which they are to be applied. This concern for application is important, regardless of whether the emphasis is on the acquisition of organized knowledge, on improvement of action in daily life, or on interrelationships between knowledge and action. In one approach to the organization of learning activities, the focus of the educative activity alternates between study of adult life activities and study of relevant knowledge. The learner initiates the series of learning episodes either with the identification of an action problem or with information from literature or peers that alerts him to a probable problem. This episode is followed by episodes in which the learner studies several areas of organized knowledge that seem to be most useful for a better understanding of the action problem, and then uses the resulting insights to redefine or further specify the problem. With the greater specification of the problem, the learner can

proceed to seek information from the literature or from peers or from his own records that suggests alternative solutions to the problem. The specific problem can next be examined as a basis for deciding which solution seems most applicable. Again literature and records can be consulted to help develop a detailed course of action to achieve the solution. In the process of implementing the solution, the learner can reflect on progress and make adjustments as called for with a diagnostic problem solving approach to the organization of learning activities. In this way, the learner's continuing search for meaning and understanding alternates between study of the action problem and study of organized knowledge related to the problem (Knox, 1973).

The third principle of organization is gratification. To be sure, if a learner persists in a relevant educational activity, it is likely that he finds the experience gratifying in some way. But in what way? There is mounting evidence that adults who participate in the same continuing education activities do so for some quite different reasons (Houle, 1972; Tough, 1967). Although people participate in important activities for multiple reasons, one or perhaps two typically predominate. Some of the dominant reasons are expressive and the benefits to the participant are directly related to the learning activity itself. Examples include interest in the subject matter content, enjoyment of the learning activity, and interaction with other people who are related to it. Some of the dominant reasons are instrumental and the benefits to the individual are realized as he uses the learning outcomes to achieve external purposes. Examples include use of increased competence to achieve a personal goal such as through a career change, and use of increased understanding to help others. The learner can use this principle to organize learning activities so that they provide a

sufficient amount of the types of gratification that are important to him. Someone who facilitates adult learning can use this principle to help the learner to reflect on and to emphasize the types of gratification that he wants to obtain from the series of learning episodes.

The learner can also contribute to the effectiveness of the learning activities in which he engages, by performing the aspect of the mentor role that takes into account conditions of effective learning. The learner may consider conditions of effective learning when he reviews his learning plan, and also from time to time when he is engaging in the learning act. Listed below are some of the major questions that a facilitator might ask a learner in order to help him decide if there are additional ways in which he could modify the organization of his learning activities so that they are more effective.

1. Has he assumed sufficient responsibility for the major decisions about his educational needs, priority objectives, content emphasis, and types of learning activities?
2. Is the organized knowledge to be studied relevant to the solution of action problems?
3. Does the context in which the learning is to occur sufficiently resemble the context in which the changed performance will occur?
4. Is there sufficient provision for feedback so that he will receive knowledge of results?
5. Are there sufficient intrinsic incentives and satisfactions?
6. Is the physical and social setting for learning at least minimally conducive to success?
7. Have crucial external educational resources been utilized?

In planning and conducting educational programs for groups of adults, a facilitator of learning must decide on the amount of structure and organization that is appropriate, and how readily to make changes as the program proceeds. For many learning episodes it is helpful to have some plan, but to review the plan with the learners. The outcomes of early episodes in a series often have implications for subsequent episodes. As plans are reviewed and revised the planning process is intermixed with the process of conducting the educational program. It is for this reason that the phrase "program development" includes both planning and conducting learning episodes.

Evaluation Procedures

Self directedness in most activities requires objectives and conviction and effort and also evaluation. Without feedback from evaluation the individual has difficulty knowing whether or not he's making progress. Knowledge about progress encourages perseverence. Knowledge about inadequate progress provides the basis for making changes to improve progress. To evaluate progress, it is helpful to know where you are and where you're going and to have some standards by which to judge whether the changes that occur constitute adequate progress. This applies especially to the function of evaluation in continuing education.

Evaluation consists mainly of two activities, describing and judging. The facilitator who wants to evaluate adult learning should prepare three descriptions. One is of the current characteristics of the educational activity. A second description is of the intentions regarding the educational activity. The third is of the standards that are useful

to interpret any disparities between intentions and actuality. The standards can include normative data and descriptions of the performance of adults who outstandingly achieve the objectives.

In the evaluation of an educational episode or series of episodes, each of these descriptions might helpfully be divided in three parts. One part is the inputs at the start, such as his beginning level of competence, available materials, and amount of time allocated for education. A second part is the educational process. The third part is the educational outcomes, such as knowledge, skills, attitudes, competence, performance, and benefits to others at the end of the educational activity that might be attributed to the educational process.

Judging consists of making two types of comparisons. One is between intentions and actuality. This comparison helps the learner recognize how well his plans measure up to his performance. He may discover that he intended to spend twenty hours on a learning episode but actually spent thirty. He may also discover that he intended to divide his learning time about equally between reading and discussion with peers but actually spent all of it in discussion. The second comparison is between the gaps that he discovers between intentions and actuality, and information about the educational activities of other people that can serve as standards against which to interpret the changes that occur for him. He may discover that a small change in his competence is more than most persons accomplish through continuing education. He may find no gap between his performance and his intentions, but discover that both are far below the level of performance of most of his peers. His problem may be a low level of aspiration.

The reason for evaluation is to make judgments about effectiveness

of the educational activity so that the conclusions can be used to improve the educational activity. The major gaps between intentions and actuality, indicate points at which the learner can concentrate his efforts to improve his educational activity. The comparisons between gaps and standards indicate the types of efforts that need to be directed at the most important gaps, such as changes in level of aspiration or changes in methods. The descriptions of current circumstances indicate the foundation upon which improvement efforts can be built. The learner can use the resulting conclusions to continually improve his continuing education activities so that their benefits are greater than the investment (Knox, 1969).

The evaluation component of the mentor role is at once comprehensive and selective. The learner should have a procedure by which he can quickly obtain a comprehensive view of how well his continuing education efforts are progressing. He also needs a procedure by which he can evaluate in some depth those aspects of his educational activity at which the results of evaluation are likely to lead to the greatest improvements in the educational activity. The improvements in how much he learns and is able to use should be well worth the investment in evaluation. For the learner, educational evaluation is the continuing process that he uses to make judgments based on evidence about the effectiveness of his continuing education effort, in ways that encourage and facilitate his use of the results of evaluation for the improvement of his educational effort (Knox, 1973) Most of this evaluation he can and should do for himself. At some points, he will benefit greatly from a more objective contribution by others.

Listed below are 18 steps that a facilitator of adult learning might follow so that he and the learner can obtain a comprehensive overview of a learning episode.

1. Describe expected inputs (people, time, materials).
2. Describe actual inputs. What were the inputs of time, people, materials, money, and other educational resources that were actually used during the educational activity? (For some episodes, pretest results can indicate what the learner knew about the topic at the beginning of the episode.)
3. Describe external standards related to inputs. What inputs do peers allocate to similar types of continuing education efforts? What inputs are recommended by experts?
4. Compare expected with actual inputs. Did the learner's plans and intentions work out as expected? Where were the major gaps between expectation and actuality?
5. Compare the internal gaps between expected and actual inputs with external standards regarding inputs to comparable educational efforts. Is there information available on comparable activities to use as standards to interpret personal experience. If so, how does the learner's experience compare?
6. Describe expected process. In what ways does the learner intend to interact with learning materials, other people, and the other educational resources in order to achieve his educational objectives?
7. Describe actual process. What were the learning activities and related procedures that actually occurred?
8. Describe external standards related to the learning process. What do peers do when they engage in similar learning activities? What processes are recommended by experts?
9. Compare expected with actual processes. Did the learning activities and related activities take place as expected? What gaps were there?

10. Compare the internal gaps between expected and actual processes with external standards regarding processes in comparable educational efforts.

11. Describe expected outcomes. What does the learner expect to have result from the educational activity? What are his educational objectives?

12. Describe actual outcomes. What are the behavioral changes for the learner and other results that actually occur? How much did the learner actually achieve?

13. Describe external standards related to educational outcomes. What do peers typically learn as a result of similar educational activities? What outcomes are recommended by experts?

14. Compare expected with actual outcomes. Did the learner achieve his educational objectives to the extent to which he intended?

15. Compare the internal gaps between expected and actual outcomes with external standards regarding outcomes from comparable educational efforts.

16. Select aspects for more intensive evaluation. The facilitator should review the descriptive and judgmental information that he has summarized for each of the preceding fifteen steps. At which points are there the greatest opportunities to better understand and improve aspects of the educational program?

17. Conduct intensive evaluation. All of the procedures that have been developed for educational evaluation are available to the facilitator who tries to improve the program by finding out why the selected aspects of his educational activity function as they do.

18. Use results for improvement of educational effort. One of the points at which the learner can and must assume the primary responsibility for educational evaluation is in the use of conclusions.

The amount of time that a facilitator of learning will spend on such a series of evaluation steps, especially the first fifteen that provide a comprehensive overview of a learning episode, will vary with the amount of benefit he expects to obtain from doing so. The first fifteen steps can be accomplished in less than an hour. Often, more time is spent on obtaining an overview of a series of episodes. This process can be rapid and useful to the extent to which the facilitator of learning had placed information about the descriptive steps (1, 2, 3, 6, 7, 8, 11, 12, 13) in a folder at various times during the planning and conducting of the learning episode. He is then able to read through the descriptions for each step, and prepare a brief summary for each step which may also include pertinent information he knows but had not placed in the folder. He can then shift from a descriptive to a judgmental mode and accomplish the comparison steps (4, 5, 9, 10, 14, 15). Not only does such a comprehensive overview of a learning episode provide a good sense of how well it worked, it is also in a form that is well suited to use of the conclusions for planning to improve the next similar learning episode.

The adult learner needs to know how he is progressing and the conclusions from the series of evaluation steps can help to provide the knowledge of results that he wants. This is especially so for the comparison steps dealing with learning process (9, 10) and with learning outcomes (14, 15). A learning facilitator can assist an adult learner to reflect on his own

experience, to consider information about excellent performance as reflected in role models and external standards, and to suggest ways in which he would proceed more effectively in the future.

Other people besides the learner and a facilitator of learning are typically interested in the effectiveness of a series of learning episodes. Examples include administrators of the continuing education program, members of the policy board of the sponsoring organization, and representatives of a co-sponsoring group. These other people are also audiences for evaluation reports. When the program evaluation activity is being planned, the facilitator should decide which of these other people constitute audiences that should receive some report based on program evaluation. Those who are associated with a series of learning episodes can provide information about expectations if not descriptions of actual program functioning. When a facilitator interprets his evaluation findings and prepares one or more reports, he should consider the type and the form of the information that will make the conclusions most understandable to the persons who are to use them to improve the continuing education program.

The three concluding steps (16, 17, 18) may also vary greatly in the amount of time that is devoted to them in a specific instance. A facilitator of learning should be selective so that he focuses the intensive evaluation on those aspects of the series of learning episodes where opportunities for program improvement are the greatest. The use of an anonymous inventory at the start of an educational program can help learner and facilitator alike to identify the learner's current understanding of a topic, and such diagnosis can continue periodically throughout the series of learning episodes. A simple one or two page opinionnaire can be completed by learners and summarized as a basis for program modifications. Provision of an opportunity

for learners to try out what they have learned in either actual or simulated tasks can also serve evaluation purposes well. Some problems related to program functioning are best evaluated by use of someone who serves as an observer and who makes notes on the way in which the program proceeds and on suggestions for improvement. When used selectively to bring about specific program improvements, such evaluation procedures contribute to both program vitality and greater learner progress.

Conclusion

This essay has reviewed major components of the mentor role that a facilitator of adult learning should consider in the process of helping adults to learn. It contains suggestions about ways in which a facilitator can reflect on his practices and identify ideas that will help him to be more effective. The main ideas about the mentor role can be used in two additional ways. One is by the adult learner himself who wants to engage in learning episodes with a high degree of self direction. The other is by persons who work with facilitators to assist them to become more effective in the mentor role. This often occurs when the director of a continuing education program meets with those who work with him as facilitators (Rubin, 1971). Some of the ideas contained in this essay can serve as topics for discussion during staff development sessions.

Listed below are some suggestions regarding ways in which continuing education program administrators can assist facilitators of learning to become more effective in the ways in which they help adults to learn.

1. Explore the components of the mentor role as they are used by adult learners and by persons who facilitate adult learning.

2. Discuss some of the dynamics of adult learning along with implications for helping adults to learn.
3. Encourage those who facilitate learning to consider their own assumptions about the educational needs of adults in continuing education programs generally, and to test these assumptions against pertinent organized knowledge as a way of becoming more aware of the needs that influence participants in continuing education generally.
4. Become more aware of the setting or context in which continuing education will occur so that information can be obtained about needs and progress, and so that resources can be utilized that best fit program objectives and learner characteristics.
5. Understand ways to set and modify clear and realistic objectives that reflect the process of selection of the educational objectives that have the highest priority.
6. Analyze the fit between various types of learning activities and both educational objectives and learner attentiveness.
7. Consider ways in which learning activities can be analyzed so as to achieve progression, application, and gratification; and so that a continuing balance is maintained between structure and flexibility.
8. Recognize ways to focus evaluation activities on aspects of the program where program improvement is most important and most likely.

As a program administrator uses such suggestions in staff development activities, he should use the same concepts and procedures which he proposes that the facilitators use with adult learners. The staff development activities should include opportunities to alternate between action problems and knowledge resources. The guiding purpose should be to increase competence in the concepts and procedures of helping adults to learn.

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